DOCUMENT RESUME

ED 169 112 TM 008 554

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TITLE Item Response Differences and Their Implications.
PUB DATE 31 Aug 78
NOTE 20p.; Paper presented at the Annual Meeting of the American Psychological Association (86th, Toronto, Ontario, Canada, August 31, 1978)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adults; *Blacks; Caucasians; *Group Norms; *Individual Characteristics; Item Analysis; Personality Tests; *Racial Differences; *Response Style (Tests)
IDENTIFIERS *Minnesota Multiphasic Personality Inventory

ABSTRACT

This study examined similarities and differences between blacks' and whites' responses to rarely endorsed Minnesota Multiphasic Personality Inventory (MMPI) items, as well as those items responded to most differently by the ethnic groups. Our subjects, 882 normal black middle-class adults from Alabama, Michigan and North Carolina, were compared to the Minnesota normative sample. White endorsement patterns agreed with items rarely endorsed by blacks, but black endorsement patterns agreed with only one-third of the items rarely endorsed by whites. This new race-sensitive F scale may be a better measure of deviant responding for blacks than the standard scale. Race-discriminating items suggested that blacks (in comparison with whites) emphasized feelings of self-importance, were relatively cynical about motives controlling behavior, and tended to be alienated and unhappy. Whether this characterization is accurate or an artifact of the item content of the MMPI cannot be answered by data currently available. (Author/GDC)

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Symposium at American Psychological Association, Toronto, Ontario, Canada, August 31, 1978. (Sponsor: Division 12)

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Symposium: Minority Status and MMPI Scores: Empirical Findings on Normal Blacks Item Response Differences and Their Implications

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This presentation involves two comparisons of blacks' and whites' responses to selected items of the MMPI. In the first case, we will examine similarities and differences in rarely endorsed items, i.e., statements of the type which were used to develop the validity scale designated as F. In the second comparison, we will focus on items which blacks and whites respond to most differently and also consider two scales composed of such items which have been designed to adjust for race differences.

First, let me review relevant findings concerning rarely endorsed MMPI items. The F scale consists of 64 items answered in the scored direction by ten percent or less of the subjects in the Minnesota normative adult samples. These items cover a very wide range of topics, with only a few items referring to any one area of behavior or experience. There are also 38 other items which were endorsed by ten percent or less of the normative sample, but were not included on the F scale.

Research has shown personological and pathological correlates of elevated MMPI F scores obtained by whites. Early studies at the Institute of Personality Assessment and Research (Gough, McKee & Yandell, Note 1) characterized those with moderately high F scale scores

as moody, restless, dissatisfied and opinionated. High MMPI F scores obtained from court cases referred for diagnostic evaluation have been shown to be related to a diagnosis of psychopathy (Gynther, 1961; Gynther & Shimkunas, 1965), as well as to the commission of serious sex crimes (Gynther, 1962). Elevated F scores obtained from psychiatric patients appear to be associated with withdrawal, poor judgment, short attention span, delusions and hallucinations (Gynther, Altman & Warbin, 1973).

In this context, it is interesting to note that blacks typically obtain higher scores on the MMPI F scale than whites. There have been 10 studies to date comparing noninstitutionalized blacks and whites on the MMPI. In all but one of these studies, several of which attempted to control for social class, blacks obtained significantly higher scores than whites on this scale. Eighteen studies have compared black and white institutionalized subjects -- that is, psychiatric inpatients or outpatients, prisoners, etc. -- on the standard MMPI scales. In eight of the 18 comparisons, blacks got significantly higher F scores than whites. The box score to date: blacks higher than whites - 17; no significant difference - 10; whites higher than blacks - 1.

Should these results be taken as indicating that blacks have more difficulty in completing the MMPI validly due to poor reading skills or inability to follow directions or that blacks are more rebellious, non-conforming or emotionally disturbed than whites? That is, should the white-derived behavioral descriptors be applied to blacks? Gynther et al (1973) found no correlates associated with MMPIs having F scores greater than 25 produced by black psychiatric patients, although a

meaningful cluster of correlates for this code type was established for white psychiatric patients. Hedlund (1977) showed that MMPI F scores of black psychiatric patients are positively associated with items assessing "disorientation", "confusion", "delusions", and other behaviors suggesting psychosis, but concluded that" . . . very few of the significant white relationships were validated for blacks" (p. 744).

To try to cast some light on these problems, we have determined which of the MMPI items were rarely endorsed by a large sample of normal black adults. If there is a large amount of overlap between these items and the standard F scale items, that would support the continued use and general interpretation of the MMPI F scale for blacks as well as for whites. If, on the other hand, the two F scales are quite different, that would suggest that use of the original F scale with blacks leads to inaccurate and inappropriate representations of such subjects.

To briefly introduce the other topic, it might be noted that Harrison and Kass (1967) were the first to compare endorsement rates of blacks and whites at the item level. They contrasted the responses of sizable groups of black and white pregnant females in Boston and were surprised to discover that some 200 of the 500+ items differentiated the samples. Erdberg (1969) used normals in the Alabama area and obtained similar results. White (1974) analyzed the protocols of college students in Missouri and also found many discriminating items. He went two steps further. That is, he devised a 27 item race-sensitive (Rs) scale and also described how scores on this scale could be used to "adjust" the MMPIs of blacks before interpretation. More recently,

Costello (1977) has published a 32 item black-white (B-W) scale which was constructed by compiling the results of six prior studies and then cross-validated on psychiatric patients and police cadets. Our own data have been compared with the Minnesota norms to find the most discriminating items. Will analyses carried out on such widely disparate groups of subjects yield similar or different sets of items? If there is convergence toward a given cluster of items, examination of their content should reveal interesting features of black-white personality differences.

Method

Subjects were obtained from Alabama, Michigan and North Carolina. Major sources were church groups and social clubs which were paid $5.00 per participant. Black faculty and graduate students administered the inventory, usually to 5-10 persons at a time, and also asked subjects to supply face-sheet information. Confidentiality was assured by the use of code numbers rather than names. Table 1 gives some descriptive

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Table 1 about here

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information about this sample. In addition, it might be noted that approximately 2/3 of the subjects had attended segregated schools. Also, mean annual family income for the males was $14,756 and for the females was $12,296.

Comparison of these characteristics with census data (U. S. Bureau of the Census, 1976; 1977) suggests that the distribution of age,

marital status and percent unemployed is comparable to national estimates of blacks 18 years or older. Examination of other variables indicates that our sample had less frequently failed to complete high school (17% vs 50%) and had attained more college experience (50% vs 19%). Also, the sample has less unskilled and more managerial and professional vocations than blacks-in-general. This substantially middle-class sample was the result of sample selection methodology which, for the most part, included socially active and community-oriented individuals. These biases would make our estimates of race-related differences at the the item level conservative; that is, a more representative, less educated group of subjects would presumably respond in a more discrepant manner.

Endorsement rates of all MMPI items were examined to locate those items endorsed, either positively or negatively, by 10% or less of the black sample. Comparisons were then made between blacks and the Minnesota normative sample on these black "F" items, on the standard MMPI F scale items and on the 38 items which met the 10% or less criterion but were not included on the F scale. For the second analysis, T-F endorsement rates of our black sample were compared with T-F rates of the white Minnesota normative groups. Items with percentage differences of 20 or more for both males and females were selected as racially-discriminating items. This set was compared with White's and Costello's scales with a view toward identifying content areas differentially endorsed by blacks.

Results and Discussion: Rarely Endorsed Items

There were 33 items which met the criterion in the black sample, 20 keyed True and 13 keyed False. Table 2 gives the items in the order

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Table 2 about here

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they are found in the booklet form of the inventory. You can see that 22 of the 33 items are included on the MMPI F scale. Some obvious pathological items are present, e.g., #48, #123, and #151, but a number of old standbys, e.g., "My soul sometimes leaves my body" and "I see things and animals around me that others do not see", have dropped out. These omitted items were endorsed by more than 10% of the black sample.

Table 3 shows the agreement between blacks' and whites' endorsements of black F scale items, standard F scale items, and the 38

Table 3 about here

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supplementary F scale items (i.e., those that met the criterion but were not included on the F scale by the test authors). Examination of these data shows that whites and blacks responded quite similarly to the 33 items which comprise the F scale for blacks. However, responses to the standard 64 item scale shows considerable disagreement. Blacks exceeded the cut-off on about 2/3 of the items. Performance on the supplementary F items was even more disparate; blacks and whites agreed on only 1/6 of the items. Although whites are in

agreement with 85% of the items rarely endorsed by blacks, blacks concur with only 28 out of the 98 items which meet the 10% criterion for whites.

Since the degree of overlap between blacks' and whites' endorsement rates of MMPI F scale items was only about 35%, it would appear that the newly derived F scale may be, especially for middle-class members of this minority group, a better measure of deviant responding (and perhaps non-conformity?) than the standard scale. Whether blacks who obtain elevated scores on this new F scale are moody, opinionated, rebellious and emotionally disturbed, as whites who obtain elevated scores on the standard F scale have been shown to be, must await further research.

Results and Discussion: Racially Discriminating Items

Results of our search for the most racially discriminating items in our data and comparison of our results with those of White (1974) and Costello (1977) are given in two tables. Table 4 gives the items

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Table 4 about here

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on the Rs scale, the B-W scale, and those derived from the present sample. A cursory glance at the item numbers indicates that there are more differences than similarities among the three sets of data. Only 6 items are shared by White's and Costello's scales. Nine items on our set appear on White's scale, while only four of our items are found on the list compiled by Costello.

Table 5 shows the actual items which appear on at least 2 of the 3 race-discriminating scales. Certain clusters appear evident. For

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Table 5 about here

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example, items 73, 264, 400, and 415 suggest that blacks emphasize feelings of self-importance more than whites do. Items 59, 93, 117 and 124, on the other hand, suggest that blacks have a relatively cynical orientation about motives controlling behavior, especially that having to do with power or getting ahead. According to Harrison and Kass' factor analysis, items 11, 239, 284 and 364 have to do with estrangement, i.e., feelings of alienation, unhappiness and self-devaluation. Whether this mixture is an accurate portrayal of blacks or an artifact of the item content of the MMPI cannot be answered by data currently available, though Enrico Jones' (1978) study which used the coping and defense scales drawn from the MMPI and CPI suggests that the artifactual explanation is more likely to be correct.

Some may be disturbed by the lack of agreement of the three scales. Two comments should be made. First, items were derived from very different samples: White's from college students, Costello's from a mixed bag of psychiatric patients, prisoners and normals and ours from adults averaging 35 years of age living in the community. Second, a different type of presentation would highlight similarities. White, for example, found 126 cross-validated discriminating items. Our results for those items are confirmatory in 2/3 of the cases with only about 7% reversals.

Concluding Remarks

The present MMPI F scale does not correspond very well with a scale derived for blacks using the same criterion. We recommend that the new scale be used to test black samples. A score of 3 would be the expected mean value, 7 would be equivalent to a T-score of 60 and 11 equivalent to a T-score of 70. What correlates elevated scores on this scale have remains to be seen. A final version of a race-sensitive scale has not yet been developed. It may be necessary to use different versions for different samples. In the absence of an MMPI for blacks, these scales may be useful in adjusting blacks' MMPI profiles before interpretations are made.

Reference Note

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Footnote

This paper is a revision and extension of an article prepared by Malcolm D. Gynther, David Lachar and W. Grant Dahlstrom which will appear in the Journal of Consulting and Clinical Psychology sometime in 1978.

Table 1

Characteristics of Black Sample

Size: 882; 321 males, 561 females

Age: 18-65; $\bar{x}_m = 36.0$, $\bar{x}_f = 34.1$

Education: < 12 years - 15%

12 years - 27%

13-15 years- 26%

16 years - 18%

> 16 years - 14%

Marital Status: Married - 50%

Single - 30%

Other - 20%

Employment Status:

Unskilled, unemployment, on welfare	- 15%
Semi-skilled	- 21%
Skilled manual	- 12%
Clerical, sales, technicians	- 18%
Administrators, minor professionals	- 8%
Managers, lesser professionals	- 22%
Executives, major professionals	- 3%

Treatment for emotional (nervous) condition:

Males - 3.7%; Females - 6.2%

Time served in prison:

Males - 2.1%; Females - 0.7%

Table 2

MMPI Items Rarely Endorsed by Blacks

(* - On standard MMPI F scale)

2. I have a good appetite (F).

10. There seems to be a lump in my throat much of the time (T).

*14. I have diarrhea once a month or more. (T)

*23. I am troubled by attacks of nausea and vomiting. (T).

*48. When I am with people I am bothered by hearing very queer things (T).

*49. It would be better if almost all laws were thrown away. (T).

*75. I get angry sometimes (F).

*85. Sometimes I am strongly attracted by the personal articles of others such as shoes, gloves, etc., so that I want to handle or steal them though I have no use for them (T).

88. I usually feel that life is worth while (F).

90. Once in a while I put off until tomorrow what I ought to do today (F).

104. I don't seem to care what happens to me (T).

*113. I believe in law enforcement (F).

*123. I believe I am being followed (T).

*151. Someone has been trying to poison me (T).

*177. My mother was a good woman (F).

*196. I like to visit places where I have never been before (F).

*197. Someone has been trying to rob me. (T).

*210. Everything tastes the same (T).

*211. I can sleep during the day but not at night (T).

Table 2 (cont'd)

MMPI Items Rarely Endorsed by Blacks

(* - On standard MMPI F scale)

*220. I loved my mother (F).

*227. I have been told that I walk during sleep. (T)

*246. My neck spots with red often (T).

*257. I usually expect to succeed in things I do (F).

*258. I believe there is a God. (F)

*272. At times I am all full of energy (F).

*276. I enjoy children (F).

285. Once in a while I laugh at a dirty joke (F).

*291. At one or more times in my life I felt that someone was making me do things by hypnotizing me (T).

324. I have never been in love with anyone (T).

339. Most of the time I wish I were dead (T).

365. I feel uneasy indoors (T).

393. Horses that don't pull should be beaten or kicked (T).

565. I feel like jumping off when I am on a high place (T).

Table 3

Number of Blacks' F Scale, MMPI F Scale and Supplementary F Items Endorsed Below and Above the Ten Percent Level by Minnesota White Normal Adults and Black Adult Subjects in New Normative Sample

	Blacks' F Items (N=33)		MMPI F Items (N=64)		Supplementary F Items (N=38)	
	≤10%	>10%	≤10%	>10%	≤10%	>10%
Blacks	33	0	22	42	6	32
Whites[a]	28	4	60	4	38	0

[a]One of the 33 items (i.e., Ø565) can't be assigned to either category since the exact percent True response is not available for the revised Minnesota white adult group.

Table 4

Highly Discriminating "Racial" Items*

White's Rs scale		Costello's B-W scale		Gynther et al (1978)	
11	226	4	304*	11	284
16	229	11	349	26*	325
59	239	30*	364	59	378*
67	241	73	386	73	400
73	264	78	400	93	415
81*	275	81*	415	117	430
84	284	124	420	127	437
93	298	165	429	155*	453
117	316	167	433	214*	465
124	319	170	446*	222	470*
135	343	184	456	226	481
147	347*	206	457	231	522*
157	364	213	490	239	525
222		221	498	270*	548*
		264	513	277	
		280	527		

* Blacks respond "False" to these items significantly more frequently than whites. In all other cases, blacks respond "True" significantly more frequently than whites.

Table 5

Content of Items Endorsed by Blacks on at least 2 of 3 Race-Discriminating Scales

11. A person should try to understand his dreams and be guided by or take warning from them.

59. I have often had to take orders from someone who didn't know as much as I did.

73. I am an important person.

81. I think I would like the kind of work a forest ranger does (F).

93. I think most people would lie to get ahead.

117. Most people are honest chiefly through fear of being caught.

124. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.

222. It is not hard for me to ask help from my friends even though I cannot return the favor.

226. Some of my family have habits that bother and annoy me very much.

239. I have been disappointed in love.

264. I am entirely self confident.

284. I am sure I am being talked about.

364. People say insulting and vulgar things about me.

400. If given the chance I could do some things that would be of great benefit to the world.

415. If given the chance I would make a good leader of people.